

SOCIAL RELATIONSHIPS AND ADOLESCENTS' HIV COUNSELING AND TESTING DECISIONS IN ZAMBIA

Families play an important role in youths' decision-making about getting tested for HIV, according to a study in Zambia. In addition, few HIV-positive youth access care services following testing. To encourage youth to seek voluntary counseling and testing (VCT) and ensure that they receive follow-up care, program managers should implement communication strategies that promote discussion about VCT within families and strengthen referral systems to better link HIV-positive youth with care services.



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Young Voices of Hope study interviewers.

RESEARCH SUMMARY

HIV voluntary counseling and testing programs play an important role in helping clients adopt HIV preventive behaviors and identifying people who need follow-up treatment and support services (UNAIDS/WHO 2004). Even though most HIV infections are estimated to be occurring among young people ages 15-24 (UNAIDS 2004), this group, particularly those still in their teens, have been underrepresented among those accessing VCT services (McCauley 2004).

Research conducted by Horizons and partners (2001) revealed that social relationships, including family interactions, may influence young people's decisions regarding HIV testing. The Young Voices of Hope research study builds upon these findings by examining how indi-

vidual, relational, and environmental factors influence adolescents' demands for and experiences with VCT. Such information is important in order to identify strategies for increasing the uptake of VCT by youth so that they can take advantage of the prevention and care benefits of knowing their HIV status.

Study Methods

YVH was a two-phased research study conducted from June 2003 to February 2004 in Ndola, Zambia, in collaboration with the Hope Centre, a Development Aid from People to People Project (DAPP). During the first phase, the research team conducted qualitative in-depth interviews with 40 HIV-tested adoles-

cents between the ages of 16 to 19 years. The purpose of these interviews was to assess who adolescents involved before, during, and after receiving VCT; when and why they involved them; and what kind of reaction they received from those they involved. Researchers also conducted 11 in-depth interviews with informants' family members who knew the young person's HIV status.

Horizons conducts global operations research to improve HIV/AIDS prevention, care, and support programs. Horizons is implemented by the Population Council in partnership with the International Center for Research on Women (ICRW), the Program for Appropriate Technology in Health (PATH), the International HIV/AIDS Alliance, Tulane University, Family Health International, and Johns Hopkins University.

were young peoples' mothers, fathers, brothers, and sisters, ranging in age from 18 to 61 years.

The overall survey sample from the second phase of research activities consisted of more females than males (62 vs. 39 percent) and more in-school rather than out-of-school youth (61 vs. 39 percent). In addition, the vast majority of youth were single (93 percent), half lived

During the second phase, the research team conducted a household survey among 550 randomly selected 16 to 19 year olds in the Chifubu area of Ndola. The survey questionnaire covered sociodemographic, individual, relational, and environmental factors. Sociodemographic factors included descriptive variables such as age and school status. Individual factors assessed cognitive variables such as HIV risk perception and knowledge. Relational factors captured adolescents' sources of general social support, as well as their perceptions of their family, peers, and sexual partners' attitudes and beliefs toward VCT. Environmental factors assessed youth's perceptions about the accessibility and quality of VCT in their community. Youth counselors from neighboring health clinics were trained to administer the survey. Interviews were conducted in either Bemba or English, based on the respondent's preference.

The study received ethical approval from the University of Zambia's Research Ethics Committee and the Johns Hopkins Bloomberg School of Public Health Committee on Human Research.

Sample Characteristics

Among the 40 HIV-tested adolescents who completed in-depth interviews during the first phase of the research, about half were female, half were attending school, all but four females were single, and one-third self-reported being infected with HIV (n = 13). The family members interviewed

with at least one parent, and 47 percent reported having had sex.

Among the 550 survey respondents, 73 had never heard of the blood test for HIV or VCT, 36 self-reported having taken an HIV test, 98 planned to take an HIV test within the next year, 341 had never taken an HIV test and did not plan to within the next year, and 2 were removed from analyses due to missing data. Of the 36 youth who had taken an HIV test, five self-reported being infected with HIV.

Key Findings

Most adolescents who have tested for HIV have had sex, often linked to alcohol use.

During the qualitative in-depth interviews with HIV-tested adolescents, the majority of informants reported having had sex. Similarly, 32 out of the 36 survey respondents who self-reported having been tested for HIV reported having had sex. Findings from the qualitative data provide insights into these youth's behaviors. As one 17-year-old HIV-negative male said:

"My lifestyle was crowded with a lot of things like going out with girls. Not just playing but having sex with them."

While females were less likely to use the term sex, they also described situations that imply sexual risk

behaviors. For example, a 19-year-old HIV-positive female said, “I was in the dark, moving around with men.”

Some of the sexually experienced youth were motivated to take an HIV test due to concerns about the fidelity of one specific partner. The majority of males, however, discussed having sex with many partners. Often these sexual encounters occurred after the consumption of alcohol.

“I used to play in the night clubs with my friends...and if a girl gets drunk it is easy to propose that girl and everything that you want... you can do because she is drunk....”

HIV-negative male, age 19

“I had a lot of money with me so you can go to any beer place and drink; it is from these outings I used to get girls.”

HIV-positive male, age 19

A few females also described their sexual experiences in relation to alcohol.

“It was the group I was involved in, we used to like to drink and...we used to have sex without condoms.”

HIV-negative female, age 19

As this quote and others highlight, condom use was rare among these youth.

Given reports of unprotected sex and alcohol use, the tested youth in this study were indeed the type of young people that VCT services aim to attract.

Parents feel a growing responsibility to educate their children about HIV, and adolescents welcome such guidance.

In-depth interviews with family members of HIV-tested adolescents revealed that parents feel a growing responsibility to educate their children about HIV/AIDS and VCT.

“It is me who should talk to them at home. I do not expect an outsider to talk to them.... If I do not do it, I do not expect others to do it for me.”

Father, age 61

“In olden days I cannot tell you such things [about HIV], but now there is nothing to hide.... We have to talk as parents for our children to know.”

Mother, age 36

Adolescents often wanted information and guidance from their parents, but did not know how to initiate the dialogue: As one 18-year old HIV-negative male said, “I would love to talk [with my parents] but how to start the conversation?”

Adolescents frequently talk with family and friends before and after seeking VCT.

Among the 40 HIV-tested adolescents who completed qualitative in-depth interviews, the majority discussed VCT with someone before and after seeking the service. The most common social groups these youth turned to were their families and friends; unmarried sexual partners were not frequently involved.

Adolescents would often delay seeking VCT until they found a family member or friend who supported the idea of testing. A 19-year-old HIV-negative male described his experience with his family:

“In the first place I never wanted to go there [for an HIV test], but I consulted my sister. She said no and I also said no. But afterwards I asked my brother who said...you should go for VCT, so that is when I went.”

Youth who sought acceptance from friends often encountered similar situations.

“At first they [my friends] thought I am joking, but when they saw that I was serious, that is when they started saying you will die if you

know your status because of depression...at last...[one friend] said you can go my friend, we will also go after you."

HIV-positive male, age 19

Less than half of the tested youth were accompanied by someone when they physically went to the clinic for a test. Of those who had someone accompany them while they went for VCT, the majority chose a friend. These friends provided emotional and logistical support.

"I did not want to go alone.... I did not know where to start from at the clinic. But with her [my friend], she is more open, she knows a lot of people at the clinic. She introduced me to the nurses.... I then had the base where to start from...if she had not come, I would not have gone all by myself."

HIV-negative female, age 19

Youth overwhelmingly shared their test results with family and friends, but infrequently disclosed to their sexual partners. HIV-negative youth often disclosed their HIV status as a way to encourage other people to go for VCT. Among HIV-infected adolescents, disclosure was predominately to family members and typically was met with encouragement and emotional support.

Learning and disclosing one's HIV status is not linked to accessing care and support services.

Only one HIV-positive female during the first phase of qualitative interviews had accessed a care and support program. In addition, two other HIV-positive pregnant females discussed receiving pills at the antenatal care (ANC) clinic to prevent mother-to-child HIV transmission. Of the seven male informants living with HIV, not one had accessed a care and support service after learning his HIV status.

While almost half of the HIV-positive youth had disclosed to a family member, disclosure was not related to receiving post-test care and treatment. Interestingly, when recruiting for the qualitative interviews, the research team approached positive living groups in the community to find potential informants. But these groups consisted predominately of adults, with only one program having a member who was in the 16 to 19 years age range.

Youth who discussed getting tested with their family are six times more likely to plan to take an HIV test.

Data from the household survey were entered into a multivariate logistic regression model to understand the factors associated with adolescents' demand for VCT. Among those youth who had heard of VCT, the outcome variable for this analysis compared those who planned to test for HIV within the next one year (n = 98) with those who did not (n = 341).

Five variables were significantly associated with adolescents' plans to test for HIV (Table 1). Two

Table 1 Backward stepwise logistic regression final model: Plan to test for HIV

Final model variables	Adjusted OR	95 percent CI
Perception of being at risk for HIV in the next 12 months	2.71***	1.51-4.88
Ever had sex	2.33***	1.41-3.84
Have discussed with friends whether or not to test for HIV	2.61**	1.34-5.08
Have discussed w/sex partners whether or not to test for HIV	3.64*	1.13-11.71
Have discussed with family whether or not to test for HIV	6.10***	2.24-16.58

CI, confidence interval; OR, odds ratio
* < .05; ** < .01; *** < .001

of these variables represent individual factors. The odds of planning to test for HIV were more than two times greater among adolescents who had ever had sex and among youth who perceived themselves at risk of contracting HIV, when compared to their counterparts who did not report having sexual experience or a perception of risk.

The remaining three variables are relational variables. Youth who had discussed whether or not to take an HIV test with a family member were six times more likely to have plans to test than youth who never had such discussions. The odds of planning to test were 3.6 and 2.6 times greater among adolescents who had similar discussions with their sex partners and friends, respectively.

These data highlight the strong associations that individual and relational factors have with adolescents' test-taking plans. Of particular importance are discussions with family members. The family members these youth most frequently talked with include siblings, mothers, and spouses. None of the adolescents had talked with their fathers about the appropriateness of HIV testing. In addition, 63 percent of the 98 youth who planned to take an HIV test also reported that they will ask for family approval before they go for the service.

Respondents who discussed VCT with their families and believed that their families would not be upset if they got tested are more likely to have tested for HIV.

Among the survey respondents who have heard about VCT, 36 reported that they have tested for HIV compared to 439 who have not. The final logistic regression model consists of four variables that are significantly associated with adolescent test-taking behaviors (Table 2).

Sexual experience was the variable with the strongest association with HIV testing. Adolescents

Table 2 Backward stepwise logistic regression final model: Have tested for HIV

Final model variables	Adjusted OR	95 percent CI
School status: out of school	2.82*	1.26-6.35
Ever had sex	6.13***	2.03-18.48
Family will not be upset if youth takes an HIV test	5.58*	1.24-25.07
Discussed with family whether or not to test for HIV	4.18**	1.54-11.38

CI, confidence interval; OR, odds ratio
* $<.05$; ** <0.01 ; *** <0.001

with a history of sexual activity were six times more likely to have tested for HIV compared to youth who were not sexually experienced. Out-of-school youth were almost three times as likely, compared to in-school youth, to have taken an HIV test.

The remaining two variables in the model measured family-specific relational factors. Just as having discussed VCT was associated with adolescents' intentions to go for VCT, so were these discussions related to youth's actual test-taking behaviors. Adolescents who have had personal talks with a family member were four times more likely to have reported testing for HIV than their peers who have not had such interactions with their families. In addition, the odds of testing was 5.5 times greater among youth who felt that their families would not be upset if they tested than among those youth who felt their family would be upset.

Perceived negative reactions of family and friends, and fear of HIV-related stigma prevent youth from seeking VCT.

During the qualitative phase of research, the youth respondents discussed their reasons for not involving family members, friends, or sexual partners in their VCT experiences. Overwhelmingly, youth

cited concerns about how people would react to HIV testing and fear of HIV-related stigma.

Specifically, youth feared having their families question them about their sexual behavior and relationships. According to an 18-year old HIV-negative female, “I was scared that my parents will scold me for sleeping with men.” Youth also feared their families’ reactions if they found themselves infected with HIV. A 19-year-old, HIV-positive male noted that “the parents won’t be amused... since I am at school they will think it is just a waste of money.” Another 19-year-old described how he had not shared his positive test result with anyone in his family because he believed they would isolate him and “stop involving” him in family activities.

Youth also feared that their family and friends would breach their confidentiality by “talking a lot” and “spreading the news” to others about their HIV status. In addition, youth feared their peers “laughing at them” for deciding to take an HIV test or being infected with the virus. In terms of boyfriends or girlfriends, youth often chose not to disclose their HIV status to them, citing concerns that their partner would assume they are HIV-infected, or that they suspect their partner of being infected.

The majority of youth, however, did have someone they trusted and in whom they ultimately confided their HIV status. Only three females during the qualitative interviews and two during the community survey had not disclosed their HIV status to anyone outside of the health care system. Two of these females from the first phase had received VCT as part of their routine ANC care. Neither informant clearly articulated why they chose not to share their result with others; however, [one 19-year-old, HIV-negative female did say](#):

“I tore the paper [with the HIV result]...I did not want the people at home to see it...it is better I know all by myself the status...so that I know how to take care of myself, not others.”

Program Implications

The data illustrate the importance of examining relational factors in order to better understand adolescents’ VCT test-taking decisions. The cross-sectional design of the study limits the interpretation of these findings to associations, not causalities. Despite this limitation, the qualitative and quantitative data tend to mirror each other and help to elucidate how family, friends, and unmarried sex partners may or may not influence young people’s decisions to seek VCT and disclose their HIV test results. The main program implications from this research follow.

When promoting VCT, include messages that foster communication about VCT within families and among friends.

These findings support the development of innovative VCT strategies that maximize adolescents’ familial and peer networks before and after VCT. Qualitative narratives revealed that families and friends influenced young people’s VCT decisions before they undertook an HIV test. However, few youth turned to both their families and friends before HIV testing, preferring instead to confide in members of only one social group. The logistic regression models reflect the importance of having discussed whether or not to take an HIV test with family, friends, and unmarried sex partners. As such, VCT information for adolescents should be targeted to not only young people and their peers, but also their families. Such messages should encourage early involvement of family members in adolescent VCT experiences because youth tend to disclose to the same people they turn to prior to testing. This approach has implications not only for increasing adolescents’ utilization of VCT, but also for how young people cope and get support once they learn their HIV status. For uninfected youth, this support means maintaining an HIV-negative status. For HIV-positive adolescents, this support will ultimately include helping the young person manage HIV care and treatment.

Continue providing confidential VCT services accessible to adolescents.

The qualitative data support the provision of confidential VCT services in which adolescents make their own decisions about serostatus disclosure. While youth sought information and support from family and friends before seeking a test, they typically attended VCT by themselves. The fact that family members rarely accompanied youth to a VCT site, even when the youth had discussed VCT with them beforehand, highlights the importance of providing confidential VCT services to youth.

Strategies involving families in young people's VCT and care experiences need to be developed with caution. While the youth interviewed had overwhelmingly positive interactions with their families, only about half of the HIV-positive adolescents disclosed to a family member, and several informants intentionally did not share their VCT experiences with their families for fear of negative repercussions. Negative consequences resulting from disclosure have been documented in VCT studies among adults, particularly women, in sub-Saharan Africa. Although infrequent, they do occur and include violence and abandonment (Maman et al. 2003; Grinstead et al. 2001). The outcomes for disclosure among adolescents, who are at a distinctly different developmental phase than adults, require further investigation. In the meantime, family involvement should not be a requirement for accessing VCT or care and support services, but rather seen as an opportunity to support youth before and after VCT.

Further investigate how to involve young peoples' sex partners in VCT.

The data regarding unmarried sex partners and adolescents' demand for VCT showed mixed results. Findings from the qualitative interviews revealed that youth did not involve their sex partners before or during VCT, and only a few

adolescents disclosed their HIV status to a partner. Young people did not always see their sex partners frequently, however, and the relationships appeared to be sporadic. The logistic regression model, on the other hand, revealed that youth who had discussed VCT with a sex partner were three times as likely to plan to take an HIV test within a year when compared to young people who have not had such discussions. More research is needed to explore the issues involved in VCT couple counseling for adolescents. Such issues need to be better understood, and innovative strategies for reaching the sex partners of adolescents and promoting disclosure to these partners need to be tested.

Address stigma at the community level.

These findings also illustrated the need to address stigma toward VCT and people living with HIV at the community level. Young people's concerns about confiding in their families, friends, or sex partners, and why they often went for VCT by themselves, were due, in part, to fears of HIV-related stigma. Other studies have also shown that perceived stigma can act as a barrier to accessing VCT among adolescents (McCauley 2004). These fears highlight the need for VCT services to collaborate with programs that address HIV stigma in the community.

Link adolescents and their families to care, support, and treatment programs.

At the time of the study, post-test services for people living with HIV existed in Ndola, although these services were mainly utilized by adults. Out of the 13 HIV-positive adolescents interviewed during phase one of the study, only one had accessed a care and support program, and an additional two were receiving services for the prevention of mother-to-child HIV transmission. The remaining 10 youth, including all the HIV-positive males, had not accessed any type of service following VCT. With the availability of HIV treatment expanding in Zambia, VCT services need

to actively link HIV-infected adolescents to care and treatment programs. Such programs should investigate the potential role of families in assisting a young person to cope with HIV infection.

Use a framework that examines individual, relational, and environmental factors when designing VCT research and programs.

This study supports the use of a framework that takes into account the individual, relational, and environmental factors that may influence adolescents' demand for VCT. This approach has helped to identify factors associated with adolescent VCT behaviors in Ndola. Although some factors studied, such as the environmental ones, were not significant in the regression models for this population, they should still be assessed in future research. In Ndola, free VCT is widely available at all the government health clinics, the district hospital, and at NGOs, such as the Hope Centre clinic. In other communities and countries, however, quality VCT for youth may not be as accessible. In addition, adolescents are not homogenous. For instance, out-of-school pregnant females who are married may have vastly different experiences, needs, and concerns related to VCT than in-school youth who are single.

As such, future research examining VCT issues needs to consider how factors at the individual, relational, and environmental levels interact and influence adolescent test-taking behaviors. This framework can help identify areas where interventions may be most successful in increasing the uptake and impact of VCT among adolescents. 

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